

MEETING ABSTRACT

Open Access

Food allergy and PPI-responsive esophageal eosinophilia

David JT Huang^{1*}, Jason Kangeun Ko², Jorge A Mazza¹

From 3rd WAO International Scientific Conference (WISC) 2014
Rio de Janeiro, Brazil. 6-9 December 2014

Background

A retrospective study to compare the food allergy prevalence in proton-pump inhibitor-responsive esophageal eosinophilia (PPI-REE) patients and patients with eosinophilic esophagitis (EoE) not responsive to PPI therapy.

Methods

A chart review was performed for 30 patients diagnosed with EoE, prescribed PPI therapy and tested with atopic patch tests for a panel of food allergens. Patients were categorized as having PPI-REE if past clinical assessments noted significant symptomatic improvement with PPI therapy. Those without clinical response to PPI were categorized as non-responders. The two groups were compared on frequencies of other treatments offered (swallowed steroids (e.g. fluticasone, budesonide), esophageal dilatation), histology (eosinophil counts in esophageal biopsy at diagnosis) and frequency of positive food allergy tests. Statistical analysis used chi-square tests for frequency comparisons and student's t-test for average eosinophil count comparison.

Results

Of the 30 patients reviewed, 12 were found to have PPI-REE. There was no significant difference in other treatments offered to PPI-REE and non-responsive patients (10/12 and 8/18, respectively; $p = 0.21$), average eosinophil counts at diagnosis (65.7 ± 29.2 and 42.6 ± 15.6 , respectively; $p = 0.14$), nor in likelihood of food allergy as detected by skin prick (9/12 and 9/18, respectively; $p = 0.98$) or food patch testing (9/12 and 9/18, respectively; $p = 0.60$).

Conclusions

It was hypothesized that PPI-REE cases would be less atopic, with regards to foods, than non-responders due

to the possible prevalence of undiagnosed GERD in the former group [1]. However, this review failed to show any statistically significant differences between the two groups. This is consistent with attempts of other groups to distinguish PPI-REE and EoE patients on other clinical parameters [2].

Authors' details

¹Univeristy of Western Ontario, Canada. ²Schulich School of Medicine & Dentistry, University of Western Ontario, Canada.

Published: 8 April 2015

References

1. Liacouras CA, Furuta GT, Hirano I, Atkins D, Attwood SE, Bonis PA, Burks AW, Chehade M, Collins MH, Dellon ES, et al: **Eosinophilic esophagitis: updated consensus recommendations for children and adults.** *The Journal of allergy and clinical immunology* 2011, **128**:3-20 e26, quiz 21-22.
2. Dellon ES, Speck O, Woodward K, Gebhart JH, Madanick RD, Levinson S, Fritchie KJ, Woosley JT, Shaheen NJ: **Clinical and endoscopic characteristics do not reliably differentiate PPI-responsive esophageal eosinophilia and eosinophilic esophagitis in patients undergoing upper endoscopy: a prospective cohort study.** *The American journal of gastroenterology* 2013, **108**:1854-1860.

doi:10.1186/1939-4551-8-S1-A24

Cite this article as: Huang et al.: Food allergy and PPI-responsive esophageal eosinophilia. *World Allergy Organization Journal* 2015 **8**(Suppl 1):A24.

¹Univeristy of Western Ontario, Canada

Full list of author information is available at the end of the article